

BEFORE THE OFFICE OF THE COMMISSIONER OF RAILROADS

STATE OF WISCONSIN

Petition of the Wisconsin Department of Transportation for the Alteration of a Public Crossing of the Wisconsin Central Ltd. Tracks with STH 76 in the Town of Greenville, Outagamie County

9164-RX-638

FINAL DECISION

By letter dated April 26, 2006, the Wisconsin Department of Transportation (DOT) filed a petition with the Office of the Commissioner of Railroads (OCR) under §§86.13, 195.28, 195.285, and 195.29, Stats., for the alteration of a public crossing of the Wisconsin Central Ltd. (WCL) tracks with STH 76 in the Town of Greenville, Outagamie County (crossing no. 181 837Y / MP 128.17).

DOT also petitioned the OCR for the exemption of vehicles specified in §346.45, Stats., from the requirement to stop at the crossing. That section requires certain specified vehicles, such as fuel trucks and school buses, to stop at highway/rail crossings unless posted with an exempt sign.

Pursuant to due notice, public hearing was held in this matter on July 13, 2006 in Greenville, Wisconsin with hearing examiner Douglas S. Wood presiding.

On August 2, 2006, the hearing examiner issued a proposed decision. On August 21, 2006, the DOT requested that the date for the installation of the exempt signs be delayed until the end of the project. The Commissioner agrees. With that change, the Commissioner adopts the proposed decision as final.

Appearances:

**Parties**

Wisconsin Department of Transportation, Petitioner  
by  
Mark Morrison, PE  
Grade Crossing Safety Engineer  
PO Box 7914  
Madison, WI 53707-7914

In Support:

Town of Greenville  
by  
Dean Schiller  
Public Works Supervisor  
W6860 Parkview Drive  
Greenville, WI 54971

As Interest May Appear:

Wisconsin Central Ltd.  
by  
Terry Lee, PE  
Manager Public Works  
1625 Depot Street  
Stevens Point, WI 54481

#### Findings of Fact

#### THE COMMISSIONER FINDS:

The Wisconsin Department of Transportation proposes to alter the public crossing of the Wisconsin Central Ltd. tracks with STH 76 in the Town of Greenville. The DOT proposes to widen STH 76 between STH 15 and Everglade Road. The project is proposed for construction in 2007.

DOT also petitioned the OCR for the exemption of vehicles specified in §346.45, Stats., from the requirement to stop at the crossing. That section requires certain specified vehicles, such as fuel trucks and school buses, to stop at highway/rail crossings unless posted with an exempt sign.

The project will widen STH 76 from the current 22' plus shoulders to 32' plus curb and gutter (36' face-to-face of curbs). The project will also construct a 5'-wide sidewalk behind a 5'-wide terrace on the west side and an 8'-wide recreation trail behind a 5'-wide terrace on the east side of the roadway. STH 76 intersects the tracks at an angle of 73°. The tracks are and will remain in the middle of a downward grade on the roadway. The project will improve the roadway approaches by providing a level crossing area in contrast to the 2% grade through the existing crossing. The approach grade will descend at about 4.8% to the crossing from the north and 5.2% away from the crossing. The crossing consists of one mainline track.

STH 76 carries 6700 ADT (average daily traffic). The DOT projects STH 76 will carry 7530 ADT in the design year of 2026. The speed limit is 35 mph.

The railroad currently operates 6 train movements per week at a speed of 10 mph.

A driver traveling at 35 mph needs a distance of 301' for northbound traffic and 273' for southbound traffic to stop safely. The crossing is visible from more than the required safe stopping distance in each direction. Assuming a train speed of 10 mph, a driver at the safe stopping distance and traveling at 35 mph needs to see a train when it is 110' from the crossing. The sight distance available in each quadrant from the safe stopping distance is as follows: 40' in the northwest quadrant, 45' in the northeast quadrant, 120' in the southwest quadrant and 10' in the southeast quadrant. Sight distance is inadequate in all but the southwest quadrant. Visibility is restricted by buildings.

At all crossings, except those with gates, a driver stopped 25' short of the near rail must be able to see far enough down the track, in both directions, to determine if sufficient time exists for moving their vehicle safely across the tracks. Required clearing sight distance along both directions of the track, from the stopped position of the vehicle, is dependent upon the maximum train speed and the acceleration characteristics of the "design" vehicle. The necessary clearing sight distance at the STH 76 crossing is 240'. The available clearing sight distance is more than 240' if no vehicles are parked along the tracks. When vehicles are parked along the tracks, then the clearing sight distance is often inadequate.

The exposure factor at this crossing is 6700 (assuming an average of one train per day). The exposure factor equals the product of the number of trains per day and the number of highway vehicles per day, which yields a numerical value for the potential conflicts each day at the crossing.

One train-vehicle accident has occurred at this crossing since 1973. The accident occurred in 1977.

The crossing presently has 12" LED automatic flashing lights for warning devices. These warning devices are inadequate. The existing warning devices will be adequate until such time as the new warning devices are installed. In order to adequately protect public safety, the installation of 12" LED automatic flashing lights with gates and Type-C circuitry is needed because of the limited sight distance (corner and clearing). The railroad installed the existing warning devices in 1999 and they can be reused at another location.

DOT proposes that the new signals be installed by July 17, 2007, but that the gates not be activated until the roadway is reopened to unrestricted traffic in October 2007. DOT proposes that the crossing work be completed by September 1, 2007.

*Light emitting diodes (LED)* lamps replace incandescent bulbs. LEDs have higher conspicuity, a wider cone of vision, and longer life than incandescent lights. LEDs are especially useful on east-west roadways where the rising and setting sun may make the signals difficult to see.

In summary, the alteration of the crossing at-grade of the Wisconsin Central Ltd. tracks with STH 76 will promote public safety and convenience.

**Source of funding:** The signal materials and installation shall be paid by the highway project.

The cost of the crossing shall be split 93% to DOT and 7% to the railroad. The DOT is paying 100% of the cost to construct the new crossing width and 85% of the existing width [per S. 86.13 (5)].

The DOT proposes to exempt the crossing from the stopping requirement of §346.45 Wis. Stats. That section requires certain specified vehicles, such as passenger buses and fuel trucks, to stop at all railroad crossings unless posted with an exempt sign.

STH 76 traffic consists of 4.8% truck traffic and undoubtedly a substantial number of these trucks are required to stop at non-exempt crossings. Typically, about 10% of trucks are required to stop, which would be about 32 per day for the STH 76 crossing.

Exempting these vehicles from the stopping requirement of §346.45, Stats., will promote the public interest, particularly in light of public safety. Train traffic is light and low speed. Northbound STH 76 descends at a 4.8% grade to the crossing possibly creating difficult stopping conditions in bad weather. STH 76 carries a large volume of vehicular traffic, which means there would be frequent conflicts between vehicles required to stop and all other highway traffic. The crossing will have automatic flashing lights and gates for warning devices.

The state of Wisconsin has developed a very good safety record with exempt crossings, which should continue as long as exemptions are granted only under appropriate circumstances. Vehicle-vehicle accidents, typically rear-enders, have been reduced by 74% at crossings where exempt status was granted. Conversely, no exempt vehicles have been involved in a train-vehicle accident after a crossing was granted exempt status.

The order requires the DOT to install exempt signs [Sign R15-3 in the Manual on Uniform Traffic Control Devices (MUTCD)] on the vertical signal posts on each approach. The order also requires the DOT to install yellow-background advance warning exempt signs on the advance warning signs on the approaches to the crossing.

#### Ultimate Conclusions on the Issues

##### THE COMMISSIONER CONCLUDES:

1. That the alteration of the crossing at-grade of STH 76 with the Wisconsin Central Ltd. tracks in accordance with the design plans of the Wisconsin Department of Transportation in the Town of Greenville, Outagamie County will promote public safety and convenience.
2. That in order to adequately protect and promote public safety, it is necessary to install and maintain 12" LED automatic flashing lights with gates.
3. That it is reasonable that the Wisconsin Central Ltd. bear 7% of the cost for the crossing construction.
4. That it would promote the public interest to exempt the crossing of STH 76 with the tracks of the Wisconsin Central Ltd. from the stopping requirement of §346.45, Wis. Stats.

## Conclusion of Law

### THE COMMISSIONER CONCLUDES:

That the jurisdiction of the Office of the Commissioner of Railroads under §§86.13, 195.28, 195.285 and 195.29, Stats., extends to this matter. Accordingly, the Office enters an order consistent with the findings of fact.

## Order

### THE COMMISSIONER ORDERS:

1. That the **Wisconsin Central Ltd.** shall install and maintain a concrete-panel crossing at-grade of **STH 76** with its tracks in accordance with the design plans of the Wisconsin Department of Transportation in the Town of Greenville, Outagamie County by **September 1, 2007** (Crossing No. 181 837Y / MP 128.17).

2. That the **Wisconsin Central Ltd.** shall install and maintain 12" LED automatic flashing lights with gates, Type-C circuitry, and other appropriate appurtenances in accordance with such plans as are filed with and approved by the Office of the Commissioner of Railroads at the crossing of its tracks with **STH 76** at-grade in the Town of Greenville, Outagamie County by **July 17, 2007, provided that the gates shall not operate until the highway is completed** (Crossing No. 181 837Y / MP 128.17).

3. That the **Wisconsin Central Ltd.** shall submit to the Office of the Commissioner of Railroads signal and circuit plans with the cost estimate of its proposed installation and upon completion of the signal project, a detailed statement of the actual cost to the Office and to the Wisconsin Department of Transportation.

4. That the signal installation work herein ordered shall not begin until the regional office of the Wisconsin Department of Transportation informs the railroad that they may start such work and such start notice will not be issued until appropriate federal aid or other funding arrangements have been assured. The cost of the new project initiated before the start notice will not be reimbursed with public funds and shall be the responsibility of the railroad.

5. That the **Wisconsin Department of Transportation** shall install and maintain exempt signs (Sign R15-3 in the MUTCD) on the signal masts on each approach to the crossing of **STH 76** with the Wisconsin Central Ltd. tracks in the Town of Greenville, Outagamie County by **October 1, 2007** (Crossing No. 181 837Y / MP 128.17).

6. The **Wisconsin Department of Transportation** shall also install and maintain yellow-background advance warning exempt signs (Sign W10-1a in the MUTCD) on the advance warning signs by **October 1, 2007**.

7. That the **Wisconsin Department of Transportation** shall not open STH 76 at the railroad crossing to unrestricted public use until the installation and activation of the automatic gates devices ordered above.

8. That the **Wisconsin Central Ltd.** shall bear 7% of the cost of the crossing construction and any cost assessed to the railroad pursuant to §195.60, Stats., for the investigation of this matter by the Office. The railroad shall not pass on those assessment costs either directly or indirectly.

9. That jurisdiction is retained.

Dated at Madison, Wisconsin (August 21, 2006).

By the Office of the Commissioner of Railroads.

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Rodney W. Kreunen  
Commissioner of Railroads

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